

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 26, 2005

Major General James E. Simmons
U.S. Department of the Army, AFZF-PW-ENV
77th and Warehouse Avenue, Building 4219
Fort Hood, Texas 76544

Re: Permit Amendment and Renewal
Permit Number: 24538
11 Paint Booths
Fort Hood, Bell County
Regulated Entity Number: RN101612083
Customer Reference Number: CN 600126262

Dear Major General Simmons:

This is in response to your Form PI-1 entitled "General Application for Air Preconstruction Permits and Amendments" and Form PI-1R entitled "General Application for Air Permit Renewals" concerning the proposed amendment and renewal of Permit Number 24538. We understand that you propose to add one spray booth (Emission Point No. 11057).

This will acknowledge that your application for the above-referenced amendment and renewal is technically complete as of January 11, 2005. In accordance with Title 30 Texas Administrative Code § 116.116(b) [30 TAC § 116.116(b)], and based on our review, Permit Number 24538 is hereby amended in accordance with your proposal. This information will be incorporated into the existing permit file.

Also, in accordance with 30 TAC § 116.314(a), and based on our review, your permit is hereby renewed. Enclosed is a permit for your facility. Also enclosed are new conditions and a maximum allowable emission rates table. We will appreciate you carefully reviewing the conditions of the permit and assuring that all requirements are consistently met.

This permit will be in effect for ten years from the date of approval (Commission's final decision). If this permit is appealed and the permittee does not commence any action authorized by this permit during judicial review, the term will not begin until judicial review is concluded.

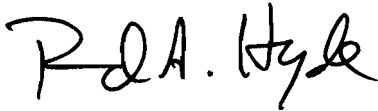
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Re: Permit Number: 24538

Please reference the regulated entity number (RN), customer reference number (CN), and permit number noted in this document in all your future correspondence for the referenced facility or site. The RN replaces the former Texas Commission on Environmental Quality account number for the facility (if portable) or site (if permanent). The CN is a unique number assigned to the company or corporation and applies to all facilities and sites owned or operated by this company or corporation.

Thank you for your cooperation in sending us the information necessary to evaluate your operations and for your commitment to air pollution control. If you have any questions, please contact Ms. Kristy Roche at (512) 239-2205 or write to the Texas Commission on Environmental Quality, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-163), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,



Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

Fon

GS/KHR/pll

Enclosures

cc: Mr. Salal Tahiri, Air Section Manager, Region 9 - Waco

Project Number: 107266

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO
U.S. Department of the Army
AUTHORIZING THE CONTINUED OPERATION OF
11 Paint Booths
LOCATED AT
Fort Hood, Bell County, Texas
LATITUDE 03° 06' 57" LONGITUDE 097° 56' 19"

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of date of issuance, discontinues construction for more than 18 consecutive months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant a onetime 18-month extension of the date to begin construction. [30 TAC § 116.120(a)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting, Remediation, and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with § 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition are applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMIT 24538

Date: April 26, 2005

A handwritten signature in black ink, appearing to read "Glenn Shankle".

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

SPECIAL CONDITIONS

Permit Number 24538

1. This permit authorizes surface coating operations at Fort Hood located on U.S. Highway 190, Bell/Coryell County. It does not cover the following facilities authorized under Permit By Rule (PBR):

Facility	PBR
Painting in Booths with EPNs: 9138-1, 9138-2, 4615-1, 4483-1, 88036-1, and 1156-1	106.433
Incineration	106.491
Degreasing	106.454
Fuel Storage Tanks	106.478
Abrasive Cleaning	106.452

2. All equipment that has the potential to emit air contaminants shall be identified and marked in a conspicuous location to correspond with the site plot plan and emission point numbers (EPNs) on the maximum allowable emission rates table (MAERT).

EMISSION LIMITATIONS

3. There shall be no visible emissions from the stacks or building doors and openings.
4. Emissions shall be controlled such that they do not cause nuisance conditions, as defined in Title 30 Texas Administrative Code § 101.4. Additional controls or other corrective measures may be required if determined to be necessary by the Waco Regional Office of the Texas Commission on Environmental Quality (TCEQ).

OPERATIONAL LIMITATIONS

5. High-volume, low-pressure spray guns or equivalent transfer efficiency application equipment shall be employed.
6. Fuel for the Booth (EPN 13065) intake air preheater shall be pipeline-quality, sweet natural gas.

SPECIAL CONDITIONS

Permit Number 24538

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7. All booths, except Booth EPN 7013, shall be equipped with dry filters which arrest at least 99 percent of the particulate matter (PM) vented through them. Booth EPN 7013 shall be equipped with a water wash and/or dry filter system capable of arresting at least 99 percent of the PM vented through it. Both types of control equipment shall be serviced as recommended by the manufacturer to maintain the stipulated capture efficiencies.
8. Minimum paint booth exhaust stack heights above ground level shall be as follows for EPNs: 40001-3 (38 feet); 38003, 32023, and 9576 (36 feet); 88027-1 through 88027-4 (34.5 feet); 7013 (39 feet); 13065 (52 feet), and 11057 (44.75 feet). All exhaust stacks shall have no restrictions or obstructions to their vertical discharge points.
9. Minimum in-booth drying times for painted vehicles shall be 30 minutes for Booths, EPNs 40001-3, 88027-1, 88027-2, and 88027-3; 45 minutes for Booths, EPNs 32023, 38033, 13065, and 9576; and 8 hours for Booths, EPNs 7013 and 88027-4.
10. This permit allows the use of volatile organic compounds (VOC) and PM containing compounds or products which meet the following conditions:
 - A. There is no overall increase in the emission rates (ERs) for all contaminant categories on the MAERT.
 - B. The air contaminants are emitted from the same emission points as listed on the MAERT.
 - C. The total makeup (weight percent of ingredients is 100 or more) of both the replaced and replacement coatings/solvents are known.
 - D. The following formula is satisfied for new contaminants:

$$ER_{\text{new}} * \Phi \text{ } \mu\text{g}/\text{m}^3 \leq \text{ESL}_{\text{new}}$$

Where:

ER_{new} - maximum hourly ER of new contaminant (ingredient of new coating or solvent)

ESL_{new} - short-term Effects Screening Levels (ESL) of new contaminant from the most current ESL list published by the TCEQ.

Φ - impacts factor for paint booth, where material is used as provided below:

SPECIAL CONDITIONS

Permit Number 24538

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Booth EPNs	Φ value
40001-3	6.87
7013 and 13065	15.33
38033	26.11
11057	5.77

Booth EPNs	Φ value
32023	9.07
9576	53.11
88027-1 through -4	20.22

NATIONAL SECURITY EMERGENCY CONDITIONS

11. Special Condition Nos. 9 and 10, and the MAERT may temporarily be exceeded in the event of national security emergency, when the need for rapid response on the part of permittee makes it impractical to meet the procedural requirements for amending this permit. This national security exclusion may be invoked:
 - A. During emergencies that require physical or operational changes to the facilities that would trigger a permit amendment.
 - B. When failure to invoke this national security exclusion could hinder the ability of permittee to comply with Presidential or Department of Defense Directives in a timely manner because of the time periods and/or public notice requirements in obtaining an amendment.
12. The following conditions shall be met by permittee whenever the national security exclusion of Special Condition No. 11 is invoked:
 - A. As soon as practicable, but no later than seven calendar days since invoking the conditions of Special Condition No. 11, permittee shall notify in writing the TCEQ Waco Regional Office and the TCEQ Austin Office of Permitting, Remediation, and Registration, Air Permits Division of the use of this condition.
 - B. If permittee seeks to rely on the temporary national security emergency exclusion for longer than 30 calendar days from the date of notice in Special Condition No. 12A, the Deputy Director for Environmental Programs shall seek authorization from the TCEQ Waco Regional Office and the TCEQ Air Permits Division in Austin. The authorization to continue use of the conditions of Special Condition No. 11 shall be required for each consecutive 30-day period following the initial notification date

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in Special Condition No. 12A.

- C. As soon as practicable, but no later than seven calendar days after the use of the conditions of Special Condition No. 11 are no longer needed, permittee shall notify in writing the TCEQ Waco Regional Office and the TCEQ Austin Office of Permitting, Remediation, and Registration, Air Permits Division that the use of the temporary national security emergency exclusion has ceased.
- D. As soon as practicable, but no later than 45 calendar days after the date of notification in Special Condition No. 12C, permittee shall provide a written report to the TCEQ Waco Regional Office and the TCEQ Austin office of Permitting, Remediation, and Registration, Air Permits Division that describes the reasons for relying on the exclusion, the emission points affected, the amount of increased emissions, and other information needed to determine the nature and extent to which the source exceeded the MAERT.
- E. (1) Permittee need not submit an application for amendment to the TCEQ under Special Condition No. 11 if the physical or operational changes to the source resulted only in temporary modification; that is, a modification that lasts no longer than the period of national security emergency.
- (2) As soon as practicable, but no later than 45 calendar days after the date of notification in Special Condition No. 12C, permittee shall submit an application for permit amendment in the event that the physical or operational changes made at the source in response to the national security emergency are not temporary.

RECORDKEEPING

- 13. In addition to the requirements of General Condition No. 7, the following documentation and records shall be kept on a two-year rolling retention basis and shall be used to demonstrate compliance with Special Condition Nos. 7, 10, and the MAERT:
 - A. Material Safety Data Sheets or Air Quality Data Sheets for all raw materials with potential to emit airborne contaminants.
 - B. Records of substitution of materials that show how Special Condition No. 10 is satisfied and the date that the substitution occurred.

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- C. Manufacturer's documentation of arrestance efficiency of spray booth filters.
- D. The following data shall be used to produce a monthly report that shows the hourly pound per hour (lb/hr), monthly pound per month (lb/mo), and annual (tons/yr) VOC, and PM ERs for each emission point on the MAERT.
- (1) Monthly usage records of coatings and solvents. Monthly usage records of coatings and solvents shall be determined by inventory tracking or purchase records.
 - (2) Daily records of hours of operation of each paint booth.
- E. Calculations shall be performed as follows:

The hourly ERs (lb/hr)

for VOC

$$\frac{(U_1 * X_1 + U_2 * X_2 + U_3 * X_3 + \dots + U_n * X_n) * Y}{H_m}$$

Where,

$U_1, U_2, U_3, \dots, U_n$ - monthly usage records for coatings or solvents (gallon [gal] per month [mo]).

$X_1, X_2, X_3, \dots, X_n$ - VOC content of coatings or solvents (lb/gal).

H_m - sum of daily hours of operation of booth during the month (hr).

For short-term booth VOC emissions,

Y - transfer efficiency x booth flash-off percent + overspray percent

For short-term booth VOC emissions,

Y - transfer efficiency x fugitive flash-off percent

The annual ER (tpy) for each contaminant category in Special Condition No. 13E shall be calculated by adding the current month's ERs (lb/mo) to the sum of the ERs (lb/mo) from the previous 11 months and multiplying the sum by (1/2,000) (ton/lb).

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POLLUTION PREVENTION

16. Paint booth filters shall be removed and disposed of in a manner that minimizes trapped PM from escaping into the atmosphere.

Dated April 26, 2005

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 24538

This table lists the maximum allowable emission rates and all sources of air contaminants covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY (4)
40001-3-1, 40001-3-2, 40001-3-3, 40001-3-4, 40001-3-5, and 40001-3-6	Building 40001-Booth 3	VOC	8.58	22.44
		PM	0.02	0.03
40001-3-F	Building 40001 Flash Off Fugitives	VOC	0.80	10.79
40001-3-7	Building 40001 Booth Intake Air Preheater	SO ₂	0.004	0.02
		NO _x	0.66	2.87
		CO	0.55	2.41
		VOC	0.04	0.16
		PM	0.05	0.22
38033-1-1	Building 38033 Booth	VOC	5.00	15.30
		PM	0.01	0.03
38033-1-F	Building 38033 Flash Off Fugitives	VOC	0.30	6.52
32023-1-1 and 32023-1-2	Building 32023 Booth	VOC	5.00	15.30
		PM	0.01	0.03
32023-1-F	Building 32023 Flash Off Fugitives	VOC	0.30	6.52
9576-1-1 and 9576-1-2	Building 9576 Booth	VOC	4.60	14.32
		PM	0.01	0.02
9576-1-F	Building 9576 Flash Off Fugitives	VOC	0.20	5.55
88027-1-1 and 88027-1-2	Building 88027 Booth 1	VOC	6.50	20.64
		PM	0.02	0.04

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY (4)
88027-2-1 and 88027-2-2	Building 88027 Booth 2	VOC PM	6.50 0.02	20.64 0.04
88027-3-1 and 88027-3-2	Building 88027 Booth 3	VOC PM	6.50 0.02	20.64 0.04
88027-4-1, 88027-4-2 and 88027-4-3A	Building 88027 Booth 4	VOC PM	12.00 0.02	22.84 0.04
88027-1-F, 88027-2-F, 88027-3-F, and 88027-4-F	Building 88027 Flash Off Fugitives	VOC	2.10	29.23
88027-4-3B	Building 88027 Booth Intake Air Preheater and RTO	SO ₂ NO _x CO VOC PM	0.0009 0.15 0.13 0.008 0.05	0.004 0.66 0.55 0.04 0.01
7013-1-1 and 7013-1-2	Building 7013 Booth	VOC PM	12.60 0.03	4.30 0.01
7013-1-F	Building 7013 Flash Off Fugitives	VOC	0.30	0.54
13065-1-1 and 13065-1-2	Building 13065 Booth 1	VOC PM	4.60 0.01	14.32 0.02
13065-1-F	Building 13065 Flash Off Fugitives	VOC	0.30	5.55

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	AIR CONTAMINANTS DATA	
			Emission Rates	
			lb/hr	TPY (4)
13065-2	Building 13065 Booth Intake Air Preheater	SO ₂	<0.01	0.01
		NO _x	0.31	1.34
		CO	0.07	0.29
		VOC	0.02	0.08
		PM	0.04	0.16
11057-1A	Building 11057 Booth	VOC	2.60	4.45
		PM	0.01	0.01
11057-F	Building 11057 Flash Off Fugitives	VOC	0.20	1.73
11057-1B	Building 11057 Booth Intake Air Preheater	SO ₂	<0.01	0.01
		NO _x	0.04	0.18
		CO	<0.01	0.04
		VOC	<0.01	0.01
		PM	<0.01	0.02
	Site-wide	Single HAP		<10.00
		Combined HAP		<25.00

(1) Emission point identification

(2) Specific point source name

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogenSO₂ - sulfur dioxidePM - particulate matter, suspended in the atmosphere, including PM₁₀.PM₁₀ - particulate matter equal to or less than 10 microns in diameter.

CO - carbon monoxide

HAP - hazardous air pollutants as defined in Title 40 Code of Federal Regulations Part 63, Subpart C.

(4) Rate is for a rolling 12-consecutive months.

Dated April 26, 2005